An economic and labor market analysis of the Wasatch Front South Area wasatch front south yol. 1 issue 1 • jobs.utah.gov











Educational Attainment in the Wasatch Front South Area

BY JIM ROBSON, ECONOMIST

The U.S. Census Bureau has partnered with other federal government statistical agencies and state workforce agencies to combine various government survey-based data programs with state-supplied administrative records on workers and employers to produce a rich set of characteristic data for local, regional and state economies. The Local Employment Dynamics (LED) program provides this new information while protecting the confidentiality of original business or individual respondents. No firm-specific or individual information

is released. The LED program offers data concerning educational attainment in the workforce.

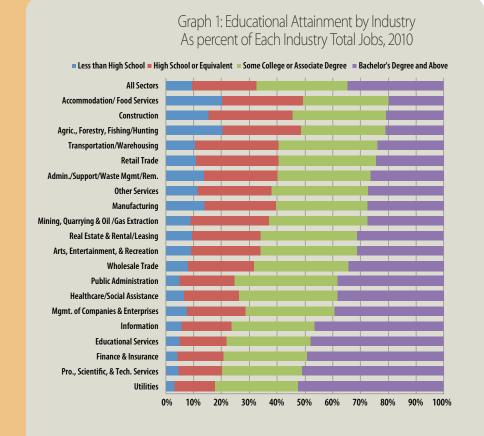
Economic success, prosperity and growth of regional economies correlate with the increasing educational attainment of the populace over time. An educated workforce is associated with higher productivity, increased real incomes and better standards of living. Levels of education have risen steadily in America over the past 70 years. For example, in the 1940 Census, 24.5 percent of people aged 25 and over had at least a high school diploma. By 2010 this had increased to 85 percent, with 27.9 percent having attained a bachelor's degree or higher.

LED divides the workforce into four mutually exclusive educational attainment categories:

- Those with less than a high school diploma
- Those with a high school diploma or equivalent, such as the GED
- Those with some college or an associate degree
- · Those with at least a bachelor's degree

The labor force consists of all individuals 16 years of age and older who are working or who are looking for work. The LED educational attainment data deals only with persons 25 years of age and above, excluding individuals in the prime years for acquiring additional formal education and training.

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The LED regional labor market data is divided into 20 industrial sectors. The largest for Wasatch Front South is healthcare and social assistance services, accounting for 52,286 jobs or 11 percent of the total jobs in 2010. The smallest industry, agriculture/forestry/fishing/hunting, had 231 jobs or just 0.05 percent. Total payroll employment in 2010 was 474,040.

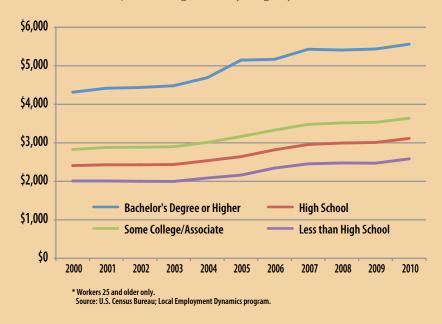
Graph 1 shows the percent distribution by the 4 educational attainment categories for the 20 industry sectors and the total of all sectors. This chart is sorted by the percentage of the industry's workforce that has at least a bachelor's degree, beginning with accommodation/food services at the low end with 19.9 percent to a high in utilities at 52.4 percent. For 18 of the 20 industries, more than 50 percent of their workforce has acquired education beyond a high school diploma or equivalent.

Data

United States statistical information on the relationship between higher educational attainment and more pay has been well established as long as these types of data have been collected. Those with more education receive a higher average pay and achieve greater lifetime earnings. The Bureau of Labor Statistics data shows that those with higher levels of education are less likely to be unemployed despite the economic situation.

The LED information for Wasatch Front South confirms this relationship. Chart 2 provides an annual time series from 2000 to 2010 that shows the average monthly wage in Wasatch Front South. In 2010, the average worker in Wasatch Front South with at least a bachelor's degree had a monthly wage of

Graph 2: Average Monthly Wage by Worker Education



\$5,562 compared to \$3,114 for the average worker with a high school diploma. As the graph indicates, the relationship between average monthly wage and these education categories is relatively stable.

It should be noted that the average monthly wage is influenced by factors other than pay rate or hourly wage, such as the number of hours worked and job stability. Many occupations and industries that are characterized by less than full-time hours or high turnover also have lower educational attainment. Together, these factors result in lower average monthly wages for workers.

Industry

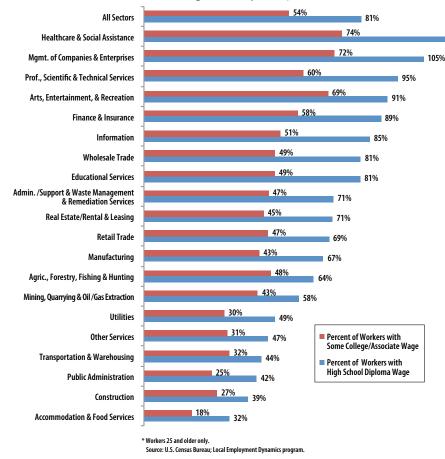
The LED data allows a comparison in the differences in average monthly wages by level of educational attainment according to industry as displayed in Chart 3. In this comparison, five years of the average percentage difference in monthly wage between a bachelor's degree or higher and the other two educational attainment levels covers 2006 to 2010. Using this five-year range (the most recent data available) provides data by

industry prior to the start of the recession through the first part of recovery in 2010. This should make the comparisons more representative of industry differences over the business cycle.

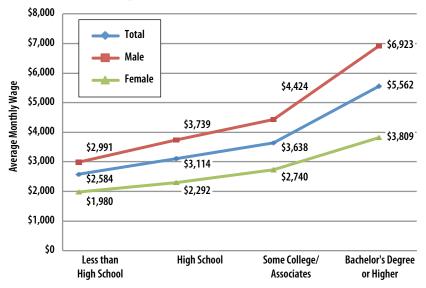
Workers with at least a bachelor's degree have higher wages than those with lower levels of educational attainment in each of the 20 industries. The highest industry wages for those with at least a four-year degree relative to others in the same industry are found in healthcare, which has highly trained and skilled medical doctors who earn significantly more than staff members who have less education. The second highest is management of companies. In this industry there are highly paid professional managers and directors who average high educational attainment and high wages. In these top two industries, those with at least a four-year degree have wages that more than double that of workers with a high school diploma.

Proceeding down the list, the industries at the top are those where a significant portion of their workforce consists of

Graph 3: Difference in Wages for Workers with a Bachelor's Degree or Higher Compared to Workers in the Same Industry with Other Education Levels* (Five-Year Average Monthly Comparison: 2006–2010)



Graph 4: Average Monthly Wage by Educational Attainment and Gender, 2010



highly educated professional staff. On the other hand, towards the bottom of list, the difference between those with a bachelor's degree or above and those with less education is not nearly as pronounced.

Goods-producing industries such as mining, manufacturing and construction generally have lower wage premiums for workers with at least a bachelor's degree. These industries typically pay workers compensating wage differentials for difficult and strenuous working conditions or oddhour shifts. In other words, higher pay for non-degreed workers with difficult working conditions shrinks the education wage gap. Other industries such as accommodation and food services hardly pay wages that are above average. In fact, this industry shows the lowest average monthly earnings of any major industry, due in part to their relatively low wage rates and part-time status. It also ranks as the lowest-paying industry for those with at least a bachelor's degree. Wages are just low regardless of educational attainment.

Following the laws of supply and demand, the accommodations/food service industry paid its highest wages (even without adjusting for inflation) in 2004—a very tight year for the labor market. And while wages for workers with high school educations have increased steadily over the last several years, wages for those with degrees remained relatively flat. As a result, the educational wage gap in this industry has closed quite steadily over the past six years. In 2004, degreed workers in accommodations/food services earned 79 percent more than high school graduates. By 2010, college-educated workers earned only 21 percent more than their high school-educated counterparts. The dearth of jobs in recent years may have meant that workers with degrees were willing to accept jobs at lower wages in order to find employment.



The More You Learn The More You Earn Cont.

Gender

Graph 4 depicts the relationship between average monthly wage, educational attainment and gender. Considering the average pay gap between male and female workers who have at least a bachelor's degree, women earn about 55 percent of what men earn in an average month. If education pays, why is there such a large gap between the average monthly wage of men and women?

Some of the most important factors that account for this wage gap include the following:

- Women on average work more part-time jobs and fewer hours in their full-time jobs than men do.
- Women work to a greater degree than men do in occupations and industries that have lower pay, such as office support, retail trade, education and nursing. Men have higher concentrations in management, construction, manufacturing and high technology. These gender distinctions are changing slowly over time but do still exist in the current economy.
- Women tend to move in and out of the labor market more than men do to take care
 of family responsibilities. When someone
 leaves employment and interrupts a career,
 they generally suffer an earnings reduction
 when they return to work.
- Women continue to face unwarranted lack of opportunity or lower pay for equal work because of gender-based discrimination.

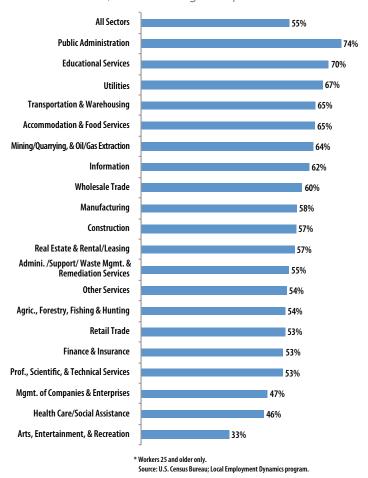
These influences and others account for the gender pay gap observed in the average monthly wage data. Much of what is described above is culturally based and has long-standing societal gender roles associated with the life choices that women and men make.

The average earnings of female and male workers differ considerably by industry. Graph 5 illustrates the percentage differential by industry between women and

men with at least a bachelor's degree in the Wasatch Front South area. Generally, as you move down the list from those industries with the smallest average difference to those with the largest difference, you also move from industries that have a higher percentage of female workers to industries that have a lower percentage of female workers with a few exceptions. In transportation and warehousing, a traditionally male-dominated industry, the workforce has relatively few workers with at least a four-year degree, but for workers with higher education attainment, gender

wage differences are less significant. The least parity between wages and gender for the most highly educated occurs at corporate headquarters and in healthcare/ social services. In these industries the average female worker with at least a bachelor's degree makes just 47 and 46 percent respectively of similarly situated male workers. These differences reflect traditions of highly paid male-dominated managerial and professional staff relative to traditionally less-paid female positions. In all industries, gender average wage differences are significantly influenced by

Graph 5: Average Monthly Wage Female to Male Comparison by Industry for Workers with a Bachelor's Degree or Higher (Five-Year Average Comparison: 2006–2010





occupational choices, hours worked, length of continuous service, technical expertise and managerial position. The interaction of these characteristics varies with a long history of traditional gender-defined roles and culturally based influences. In recent decades, gender-based limitations and strictures on career and occupational choice have been largely removed. Yet traditional patterns in average gender-related career, industry and occupational choices persist. Although there may be exceptions, all information relative to earnings, education and skill level suggest that education pays.

BY JIM ROBSON

The Wasatch Front South Economic Service Area (ESA) has entered the expansion phase of economic recovery after suffering through the recession of 2008 and 2009. Labor market conditions have improved considerably over the past year and a half with job, income and business growth. Unemployment is gradually subsiding. There are still some significant hangover effects from the bursting of the housing bubble and financial crises that are holding back residential construction activity,

but continuing job growth in most industrial sectors and a gradually improving labor market will continue to characterize economic conditions in the coming months.

Salt Lake County

The Salt Lake County economy is the largest and most diverse in Utah. As the hub of economic activity in the state, 48 percent of all payroll jobs in Utah are located in a county that contains 37 percent of the population. Several business and government headquarters are located

Payroll Job Growth—Count and Percent Change—from December 2010 to December 2011 by Industry

| | Salt Lake County | | Tooele County | | |
|----------------------------|------------------|---------|---------------|------|---------|
| | Count | Percent | Cou | ınt | Percent |
| Admin Support/Waste(2) | 3,140 | 7.7% | | -119 | -5.8% |
| PST Services & Co(1) | 2,121 | 4.0% | | 23 | 3.7% |
| Trade | 1,824 | 2.0% | | 38 | 2.1% |
| Manufacturing | 1,638 | 3.3% | | 126 | 8.0% |
| Local Government | 1,301 | 3.1% | | -121 | -4.7% |
| Financial Activities | 1,181 | 2.6% | | 9 | 2.8% |
| State Government | 775 | 2.0% | | -4 | -2.2% |
| Private Education | 717 | 7.1% | | 2 | 1.6% |
| Transportation/Warehousing | 677 | 2.6% | | -31 | -3.3% |
| Mining | 611 | 21.6% | | -4 | -5.0% |
| Healthcare/Social Services | 535 | 1.0% | | 6 | 0.5% |
| Other Private Services | 270 | 1.5% | | 31 | 9.3% |
| Leisure/Hospitality | 260 | 0.5% | | 97 | 8.0% |
| Information | 198 | 1.2% | | d | d |
| Utilities | -53 | -3.3% | | 3 | 12.0% |
| Construction | -308 | -1.0% | | -66 | -9.3% |
| Federal Government | -459 | -4.2% | | -132 | -7.1% |

⁽¹⁾ PST Services & Co. — Professional/Scientific/Technical Services and Management of Companies.

Source: Utah Department of Workforce Services.

⁽²⁾ Admin Support/Waste — Administration and Support/Waste/Remediation Services.

d = Not shown to avoid disclosure of individual firm data.



in Salt Lake City, and other businesses located in the county serve as regional centers for healthcare, financial services and other support industries for the Wasatch Front metropolitan area and industries around the state.

The University of Utah, in addition to being the largest higher education institution in Utah sponsored by state government, is a major research university, attracting resources to the state. Numerous professional, scientific and technical businesses feed off the trained workforce and research produced at the university. Industries that have been heavily influenced by university activities over the years include healthcare and information technology services and research.

The adverse effects of the recession on the Salt Lake County labor market continued through the first half of 2010 with overall job losses and increasing unemployment. Employment levels stabilized and modest job growth finally resumed in the second half of the year.

By the end of 2010, payroll jobs were increasing by 1.2 percent, with 7,121 more jobs than were recorded in December 2009. Employment opportunities were expanding in most of the major industrial sectors with the strongest job growth in mining, private education and professional/business services. Manufacturing jobs, which suffered significant losses of more than 6,500 jobs during the recession, stabilized during 2010 with a total of 50,368 jobs and an increase of 418 jobs compared to the previous year.

The healthcare industry continued to add jobs throughout the recession as employment in so many other areas was declining. Finally in 2010, the cumulative effects of reduced incomes and jobs economy-wide were felt in healthcare/ social services with year-over job growth dropping below 0.4 percent by December 2010. The construction industry suffered

the most significant job losses during the recession, but employment in this industry seemed to have stabilized by the end of 2010. Salt Lake County construction jobs fell from their peak levels during the housing boom by 30 percent, with average employment in 2010 at 29,743 compared to 42,492 in 2007. Without the return of residential construction activity in 2011, the construction industry ended the year down an additional 1 percent or 308 jobs.

Only two other industries lost jobs between December 2010 and December 2011: utilities saw a 3.3 percent reduction or 53 fewer jobs and the federal government declined by 4.2 percent, shedding 436 jobs.

Overall, payroll employment in Salt Lake County gathered strength during 2011, with December year-over job gains totaling 14,435, a growth of 2.5 percent. The industry that added the most employment was administrative support services with 3,140 jobs—mostly from temporary help services, call centers and other business support services. Trade, professional/ scientific/technical services, manufacturing, local government and financial activities added one to two thousand jobs each.

The seasonally adjusted unemployment rate in Salt Lake County peaked in October 2009 at 8.1 percent with about 44,800 residents. Prior to the recession in 2007, the average unemployment rate for the county was at the low rate of 2.5 percent or 14,000 unemployed. Over the past two and a half years, the unemployment rate has gradually declined and was quite stable for the first 3 months of 2012, registering 5.8 percent in March or about 31,700. Initial claims for unemployment benefits, while still above the low levels seen prior to the recession, are at their lowest level in 4 years, averaging 787 per week in the first quarter of 2012.

The stabilization, improvement and expansion in the Salt Lake County labor market since mid-year 2010 have been reflected quite well in the gross taxable sales

figures. For seven consecutive quarters, the second quarter 2010 through the fourth quarter 2011, Salt Lake County year-over sales tax collections have been positive. The fourth quarter 2011 year-over increase was the strongest yet, increasing by 11 percent.

Construction has been the hardest hit industry as a result of the bursting housing bubble in 2007, the 2008 financial crises and the ensuing recession. Salt Lake County construction activity hit bottom in 2010. Though construction employment levels did not increase during 2011, overall measures of activity are off the bottom. In 2011, housing unit permits and valuations were up by 9.7 percent and 20.7 percent respectively. These were not increases in single-family homes but in multi-family dwellings.

Non-residential permitted valuations were up by 103 percent and total construction valuations were up by 49.9 percent. Hopefully overall construction activity will continue to expand in 2012 and begin to contribute to Salt Lake County employment gains. Unfortunately, this will not be the result of new single-family housing construction which is expected to remain at rock bottom levels in 2012.

Tooele County

Tooele County's labor market experienced the transformation from an economy in recession to expansion in 2010. Year-over growth in jobs occurred in most industry sectors in the second half of the year, driven by increases in the goods producing industries of mining, construction and manufacturing.

Prior to the recession in 2007, the average unemployment rate for Tooele County was at 2.8 percent or 760 unemployed residents. The unemployment rate rose steadily, topping out at 8.9 percent at the end of 2009 with about 2,540 unemployed. The jobless rate has since receded to 6.3 percent by the spring of 2012.

Year-over job growth returned to Tooele County in the last six months of 2010. In December of 2010, jobs increased by a healthy 3 percent with construction and manufacturing leading the way by adding 288 jobs. In addition, leisure and hospitality provided 176 new jobs and administration/waste management/remediation services provided 107.

Unlike most counties in Utah, construction jobs increased during 2010 in Tooele County. Construction employment had been reduced from its 2008 peak levels by 40 percent through 2009. With the addition of construction jobs in 2010, average employment for the year was 581, which is 35 percent below the 2008 average.

The job expansion that looked so promising in the spring of 2011 halted and reversed by the end of the year. In December of 2011, Tooele County recorded a year-over net job loss of 140. Private sector companies in the county added 117 jobs and all three levels of government shed 257.

Manufacturing and leisure/hospitality added the most jobs over 12 months at 126 positions in manufacturing and 97 jobs in leisure/hospitality.

Two other industries experienced significant job reductions by year-end: waste management, shedding 105 jobs, and construction at 66.

The Deseret Chemical depot in Tooele County finished its assignment—the destruction of the largest stockpile of chemical weapons in the United States. This does not mean that this facility is closed. It will take almost a year and a half to decommission the facility and close it down. However, related job losses are occurring at various stages throughout 2012 and 2013.

Direct job reductions will impact waste management, professional/scientific/technical services and federal defense

industries. The loss of about 1,000 direct jobs, with associated declines in incomes and expenditures, will result in reductions of about 300 to 500 additional jobs throughout Tooele County and the larger regional economy. Indirect and induced job reductions would likely be larger if this was not a long planned for and anticipated event. Part of the current economic sluggishness in the county economy is likely due to businesses, consumers and local governments being conservative in their economic plans in anticipation of the economic effects of such a major reduction in jobs (about 10 percent of total jobs in the county), business and revenue.

The labor market outlook for the area in the next few years is contraction. Business and government leaders will be working hard to generate new and compensating economic activities and growth. Tooele is of course part of the greater Salt Lake metropolitan area and has access to this wider labor mar-

ket. Only time will tell exactly how negatively this closure will ultimately impact the residents and businesses in Tooele County.

Overall for Wasatch Front South continuing job growth and a gradually improving labor market will characterize economic conditions in the coming year. The improving economy should bring down the jobless rate. The regional economy will gain more strength as the recovery moves along. If current trends persist, the labor market should generate enough new employment by the middle of 2013 to surpass the previous record number of jobs at the end of 2007 at the onset of the recession. Even the dampening effects of relatively high gasoline prices—which reduce the discretionary income of consumers, the last hangover effects from the bursting of the housing bubble that still retard potential growth—and the closing of the Deseret Chemical Depot will not be strong enough to derail a push to a new employment record in 2013.

Wasatch Front South

TOP JOBS in Demand

- 1. Customer Service Representatives
- 2. Registered Nurses
- 3. Computer Specialists, All Other
- 4. Truck Drivers, Heavy and Tractor-Trailer
- 5. Tellers
- 6. Executive Secretaries and Administrative Assistants



- 7. Retail Salespersons
- 8. Computer Support Specialists
- 9. Sales Representatives, Services, All Other
- 10. Medical and Health Services Managers



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Economic Analysis

Studies have shown that the world economy has been going through extraordinary changes in its organization, structure, integration and interdependency. Accelerating technological change has increased the intensity of business competition and economic development, forcing continual adjustments to a changing environment. Economies benefit from this technological change only when local chambers of commerce, government, businesses and others involved in economic development are able to accurately assess relevant economic factors to develop policies geared at boosting local economies in accordance with said technological advancements. With the power of economic information, policies are designed to maintain and help the local economy to grow, be more competitive in earnings and provide better job opportunities to give residents and employees a valuable tie to their community or business.

To gain a better understanding of an area and its economy, it is important to recognize current local and regional trends and conditions. Knowledge of the local economy typically comes from some sort of analysis. This kind of insight is part of the necessary preparation for an area to create an effective strategy in the decision-making process. Understanding what is happening in the area and why it is happening allows local chambers, government and businesses to make better choices. Every region in Utah has its own unique strengths and challenges and is typically different from any of the surrounding areas. Each area or business needs certain tools to answer necessary questions that will enable it to influence its job and income situation.

Workforce Research and Analysis (WRA), a division of the Utah Department of Workforce Services, understands the need for decision makers to have as much information as possible to improve the welfare of the resident population and promote opportunity. In an effort to strengthen the understanding of local economic areas, WRA uses the knowledge and experience of the department staff's economists. Years of education and experience working with labor statistics and local economic data give these economists the expertise to answer complex questions. WRA gathers data that include employment and payroll information through surveys and employer reporting, allowing the economists to shed light on how each area's economy is functioning. They are able to determine the strengths, weaknesses, trends and overall shape of the local economy and work to apply those ideas into indications about the future economy.

WRA produced this new quarterly publication focused on local economic analysis to provide relevant information for decision-making in the areas of regional planning, local economic development and policy design. Issues are available about the statewide economy and eight different sub-state areas: Bear River, Castle Country/Southeast, Central Utah, Mountainland, Southwest, Wasatch Front North, Wasatch Front South, and Uintah Basin. The statewide version will focus on items affecting the entire state of Utah, including job-training strategies, re-employment and labor exchange activities. All will provide the reader with an in-depth look at the economy. Each issue will also inform the reader of notable DWS policy changes and focus, explaining why it affects each area.